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Barneys Canyon Mine Closure August 2016 Status Report

Nannini, Tom (RTKC) <Tom.Nannini@riotinto.com>

Thu, Sep 8, 2016 at 12:25 PM

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Cc: Douglas Bacon <dbacon@utah.gov>, "Rammell, Brent (RTKC)" <Brent.Rammell@riotinto.com>, "Heaton, Trevor (RTKC)" <Trevor.Heaton@riotinto.com>, "Vinton, Brian (RTKC)" <Brian.Vinton@riotinto.com>, "Schnoor, Steve (RTKC)" <Steve.Schnoor@riotinto.com>, "Hales, Dave (Contractor)" <Dave.Hales@riotinto.com>, "Hutchins, Stephen (KUCC)" <Stephen.Hutchins@riotinto.com>

Brian, Woody and Leslie,

Please find attached for your information, the August 2016 Barneys Canyon Mine Closure Project status report. Also, please note that we have delayed the start of the liner portion for Pad 5 Buttress until September 12th. If you have any questions, please contact myself, Brian Vinton or Trevor Heaton.

Thank you

Tom Nannini

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Barneys Canyon Mine Closure August 2016 Status Report.pdf

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September 8, 2016

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Electronic Submittal via email

Project: Barneys Canyon Mine Closure

Subject: Project Status Report for the monthly period ending **August 31, 2016**

As part of the Barneys Canyon Mine Closure Project, Rio Tinto Kennecott is submitting the following status report to Utah Department of Environmental Quality, Division of Water Quality (DWQ) and The Utah Division of Oil, Gas and Mining (DOGM). This status report is organized by issued or pending Construction Permit. Should the Divisions have any questions regarding this submittal or require additional information during the review, please contact Brian Vinton at 801.569.7887 or Trevor Heaton at 801.563.1514

North Barneys Drainage Seep Capture System [No Change]

- Engineering Activities
 - As built drawings are complete and pending submittal to DWQ for review.
- Construction Activities
 - All construction activities are complete and the system is operating. Quarterly monitoring of flows and semi-annual monitoring of quality is ongoing and is reported to DWQ in the Barneys Canyon Mine Ground Water Discharge Permit quarterly report.

Barneys Canyon Mine Heap Leach Pad #5 Buttress Construction

- Engineering Activities
 - Design engineering is complete.

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- Additional engineering may be required during construction activities. Any potential changes to the DWQ approved design plans will be submitted to DWQ for comment/approval.
- Construction Activities
 - Flare Construction has completed limited soils removals around the Pad #5 area. The limited removal is to facilitate the construction of the Pad #5 buttress
 - 7188 cubic yards of soils have been excavated and disposed of in Pad #5.
 - 22 Post Removal samples have been collected and submitted for analysis of total metal arsenic and thallium.
 - Arsenic concentrations in the post removal samples range from 34 to 581 mg/kg and an average of 172 mg/kg and median of 81 mg/kg
 - Thallium concentrations in the post removal samples range from 7 to 36 mg/kg and an average of 14 mg/kg and median of 12 mg/kg
 - 11 sample analysis have been completed for SPLP (RCRA 6)
 - Only arsenic and barium were above detections limits. Arsenic concentrations range from 0.1 to 0.6 mg/l and an average of 0.36 mg/l and median of 0.4 mg/l and barium concentrations range from 0.3 to 0.4 mg/l and an average of 0.38 mg/l and median of 0.4 mg/l
 - One split sample was taken and analysed at third party laboratory for total metal arsenic and thallium
 - Arsenic relative percentage difference (RPD) between American West Analytical Laboratory and Kennecott Environmental Laboratory is 1.38%
 - Thallium relative percentage difference (RPD) was not calculated since the concentrations are at or near the detection limits. (American West Analytical Laboratory <4.28 mg/kg and Kennecott Environmental Laboratory 7 mg/kg)
 - Granite continued the construction of the Pad #5 buttress
 - As of August 31 the buttress embankment construction is approximately 95% complete
 - Preliminary buttress lining scheduled start date has been delayed until September 12th

Barneys Canyon Mine Heap Leach Pad #1-4 Buttress Construction [No Change]

- Engineering Activities
 - Construction engineering is complete
 - Continuation of bidders documents

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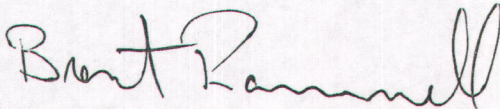
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- Construction Activities
 - Scheduled for 2017 and 2018
 -

Barneys Canyon Mine Heap Leach Pad Regrade and Cover Construction [No Change]

- Engineering Activities
 - Design/engineering continues at a 90% level
 - Dam Safety analysis continues including design and applications for submittal to State Engineer – Dam Safety
- Construction Activities
 - Scheduled for 2018 and 2019

Regards,



Brent Rammell
Principal Engineer - Projects, Engineering Services
Rio Tinto Kennecott
For: Barneys Canyon Mining Company

cc: Woody Campbell (DWQ)
Doug Bacon (UDERR)

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